

IN THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claims 1-9 (Cancelled).

Claim 10 (New): A maintenance system comprising:

a plurality of equipment units each associated with a monitoring unit for monitoring the respective equipment unit, the monitoring unit including,

a test unit for testing the respective equipment unit on proper operation and for issuing fault messages in a case when the testing indicates a failure of the respective equipment unit, and

a non-volatile memory unit for storing at least the fault messages;

a central maintenance unit in communication with the test units of the plurality of equipment units, the central maintenance unit including a diagnosis unit for checking a state of the plurality of equipment units by using the fault messages of the test units, and for generating a report on an overall state of an operation of the maintenance system; and

a data transmission link for providing a data connection between the plurality of equipment units and the central maintenance unit,

wherein the central maintenance unit is configured to make the report on the overall state of the operation available on the data transmission link, and

wherein each the plurality of equipment units further include a detection circuit for detecting, capturing, and transferring the report on the overall state of the operation from the data transmission link into the respective non-volatile memory unit after the report on the overall state of the operation is available on the data transmission link.

Claim 11 (New): The maintenance system according to Claim 10, further comprising:

a subset of equipment units grouping at least some of the plurality of equipment units into a group of equipment units, the subset including,

a group test unit connected to the data transmission link, the group test unit testing the equipment units of the group on proper operation and issuing group fault messages in a case where the testing indicates a failure of at least one equipment unit of the group, and making the group fault messages available on the data transmission link; and

a non-volatile memory unit for storing at least the group fault messages, wherein the detection circuit of the equipment units of the group are further detecting, capturing, and transferring group fault messages into the respective non-volatile memory units when the group fault messages are available on the data transmission link, and

wherein the central maintenance unit takes the group fault messages into account when making the report on the overall state of the operation.

Claim 12 (New): The maintenance system according to Claim 10, further comprising:
a user interface linked to the central maintenance unit by the data transmission link, the user interface configured to display the report on the overall state of the operation to a user.

Claim 13 (New): The maintenance system according to Claim 10, wherein the report on the overall state of the operation is a post flight report that includes a log of all the fault messages that were received by the central maintenance unit during a flight of an aircraft.

Claim 14 (New): The maintenance system according to Claim 13, further comprising:
an airborne external communications network, connected to the maintenance system, for sending the report on the overall state of the operation to a fleet management center.

Claim 15 (New): The maintenance system according to Claim 11, wherein the detection circuit analyzes labels of messages that are transmitted over the data transmission link, and retains the group fault messages and the report on the overall state of the operation that were found by analyzing the labels of the messages.

Claim 16 (New): The maintenance system according to Claim 10, wherein the central maintenance unit is configured to submit the report on the overall state of the operation after a flight upon an instruction by a user.